IN THE CIRCUIT COURT FOR BALTIMORE CITY

KEVIN TOLSON,
Plaintiff,
v.
ST. AGNES HEALTHCARE, INC.,
et al.,
Defendants.

VIDEOTAPED DEPOSITION
OF
CHARLES MICHAEL SCHUCH

At Raleigh, North Carolina
March 24, 2014 - 12:07 p.m.

Reported by:
Tammy Johnson, CVR-CM-M

APPEARANCES
FOR THE PLAINTIFF:
Rodney M. Gaston
MILLER & ZOIS
Empire Towers, Suite 1001
7310 Ritchie Highway
Glen Burnie, Maryland 21061
(410)553-6000
rodgaston@millerandzois.com

FOR THE DEFENDANTS ST. AGNES HEALTHCARE, C. STELLE:
Mairi Pat Maguire
PESSIN KATZ LAW
901 Dulaney Valley Road, Suite 400
Towson, Maryland 21204
(410)938-8800
mpmaguire@pklaw.com

APPEARANCES
FOR THE DEFENDANTS MARYLAND-PROVO, PRUDENCE JACKSON, M.D., SHAH KRUPA, P.A.:
Gregory L. VanGeison
ANDERSON COE & KING
7 Saint Paul Street, Suite 1600
Baltimore, Maryland 21202
(410)752-1630
vangeison@acklaw.com

ALSO PRESENT:
Michael Kirby, Videographer

TABLE OF CONTENTS

[ALL EXHIBITS RETAINED]

Page 5

I, Tammy Johnson, being a Certified Verbatim Reporter and Notary Public in and for the state of North Carolina, was appointed Commissioner by consent to record the deposition of Charles Michael Schuch on March 24, 2014, beginning at 12:07 p.m. at the offices of Capital Reporting, Inc., located at 8320 Falls of Neuse Road, Suite 111, Raleigh, North Carolina.

_____

[DEPOSITION EXHIBIT NO. 8 MARKED FOR IDENTIFICATION]

THE VIDEOGRAPHER: We are on the record at 12:07 p.m. This is the videotaped deposition of Michael Schuch taken by the Plaintiff in the matter of Kevin Tolson versus St. Agnes Health Care, Inc., et al., case number 24-C-12-008071 in the Circuit Court for Baltimore City.

This deposition is being held in the offices of Capital Reporting, Inc., located in Raleigh, North Carolina, on March 24th, 2014. The court reporter is Tammy Johnson. The videographer is Michael Kirby, both with the firm of Capital Reporting. Would counsel now please introduce themselves?

Page 6

MR. GASTON: Rodney M. Gaston. I represent the Plaintiff, Kevin Tolson.

MR. VANGEISON: Gregory VanGeison. I represent Prudence Jackson, M.D., and Krupa Shah, PA.

MS. MAGUIRE: Mairi Pat Maguire on behalf of Defendant St. Agnes Health Care, Inc., and Caroline Stelle, RN.

THE VIDEOGRAPHER: The court reporter may swear in the witness.

Whereupon,

CHARLES MICHAEL SCHUCH,

having first been duly sworn, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. GASTON:

Q: Sir, could you please state your name and business address?

A: Full name is Charles Michael Schuch, S-C-H-U-C-H. My business address is 211 Autumn Chase Drive here in Raleigh, North Carolina 27613.

Q: Thank you very much. Mr. Schuch, my name is Rod Gaston, and I represent Mr. Tolson in an action that's pending in the Circuit Court for Baltimore City in the state of Maryland. The reason

Page 7

I've asked you to appear here today in the state of North Carolina for your deposition is because the Defendants have identified you as a witness who may offer expert opinion testimony in this case, so I'm here basically to find out what opinions you intend to give in this case and all the factual basis for your opinions. Have you ever had your deposition taken before?

A: Yes, sir.

Q: Okay. I just want to go over a few of the rules so we can get through this and create an accurate record. If any time I ask you a question that you don't understand, stop me immediately and let me know and I will try to rephrase the question. Otherwise, if you don't, we will have assumed that you've understood the question and you've answered it appropriately. Also, if at any time you need to take a break, just let us know and we'll take a break.

There's one other rule. In normal conversation, it's -- people usually interrupt each other. And I'm sure you will have anticipated some of the questions that I'm going to ask you. So what I'd ask you to do is if you could wait until I get my entire question out before you answer, the court

Page 8

reporter will have a much easier job taking down my question and your answers. Does that sound fair?

A: It does.

Q: Okay. Sir, I want to show you what's been marked as Plaintiff's Exhibit No. 8, which is your Notice of Deposition for today, and ask you to take a look at that document, if you would. And in particular, I want to draw your attention to page 3. That --

A: This is the first time I've seen this.

Q: That was going to be my next question. That's the first time you've seen it?

A: I was actually surprised that I didn't get one.

Q: Okay. If you want to, go through and read the list of documents that we've requested. And then at the end, if you can tell me what, if any, documents you've brought with you today in accordance with my request.

[WITNESS REVIEWS DOCUMENT]

Q: Okay. Have you had a chance to read the 26 items that we asked you to bring?

A: I did.

Q: And can you tell me what items you brought with you today?

Page 9

A: Number 1.
Q: Okay. And what does that consist of, sir?
A: I had basically -- can I look at it?
Q: Absolutely. Sure.
A: It's been a while since I looked at some of it. It looks like the complaint, medical records.
Q: Can you tell me the -- from what hospital?
A: Let me see if I can find a cover letter because I think Danielle -- okay. This is the original cover letter that accompanied the stuff that I got initially.
Q: Okay. What's the date of that letter, sir?
A: July 22nd, 2013.
Q: Okay. And is that from Ms. Dinsmore, defense counsel?
A: It is.
Q: Okay. If you want to --
A: Actually directed by her but signed by Darlene Stefanowicz, paralegal.
Q: Okay. And can you just -- why don't you go ahead and read the -- do you believe that the

Page 10

items that are listed on that letter from defense counsel were the items that you received?
A: Yes, sir. I always do an inventory and -- and actually reprint what I got on my invoice.
Q: All right. Go ahead and read those for us, sir.
A: Number 1 is the complaint.
Q: Uh-huh.
A: Two is certificates of Plaintiff's certifying experts. Three is Plaintiff's expert designation. Four, Plaintiff's economic report by Richard Luritto, Ph.D. Five, prosthetic evaluation of life care cost estimate from Dale A. Berry. Six, records from Hanger Prosthetics. Seven, Workers' Compensation file. Eight, discharge summary from the University of Maryland Medical Center. And 9, evaluation by Advanced Care Physical Therapy.
Q: Okay. Have you received -- other than the documents that you just read into the record, have you received any other documents from defense counsel?
A: All by e-mail, which I didn't print, of -- one was a supplemental report or amended report from Gregory Sachs and Dale Berry. And the deposition transcript of Gregory Sachs, deposition

Page 11

transcript of Stacy Tolson, deposition transcript of Kevin Tolson.
Q: Okay. And did you read -- actually read all of these items?
A: Yes.
Q: Okay.
MR. VANGEISON: And -- and just so the record is clear because you may not think of it as a document, but you also received video clips.
THE WITNESS: Correct.
MR. GASTON: That was going to be my next question.
MR. VANGEISON: Thank you.
MR. GASTON: Thank you, Counsel.
Q: Well, what else did you receive from defense counsel?
A: A single disc that had multiple files on it, IrfanView picture files and a couple of video files.
Q: Did you look at the video?
A: Yes.
Q: Okay. And did the video show a -- an African-American male with a prosthetic device doing activities around his house?
A: Yes, it did.

Page 12

Q: And --
A: A day in the life.
Q: Oh, very good. And did the video also show an African-American -- which I'll tell you is Mr. Tolson -- walking up some steps?
A: With a split screen beside it?
Q: Yes, sir.
A: Yes.
Q: And on the other side of the screen, did it show an individual who's not Mr. Tolson walking up a -- a flight of steps sort of side by side?
A: Correct.
Q: Okay. All right. Now, did defense counsel send you anything else?
A: No, not that I'm aware of.
Q: Okay.
A: And, actually, in my report, I list everything, including those last few items that weren't on the original inventory list.
Q: And do you have your report here with you?
A: Yeah. I think I did make a copy.
Q: Okay. You can refer to it during your deposition, if you'd like.
A: I'm familiar with it, but it wouldn't

Page 13

hurt to have it under my nose. You asked if there was anything else. I did get a letter from Ms. Dinsmore tell -- giving me the trial date and talking about when I may be called and notify her for I wasn't available.

Q: Okay. All right. Anything else that you received from defense counsel in this case?

A: No, sir.

Q: Okay. Did you do any of your own research, either literature research, Internet research, telephone consultations with any other person for this case?

A: I did several phone conversations with contacts I have in our national office, a contact that I actually had with Hanger. These are people that would be involved and have knowledge of statistics, billing utilization.

Q: And when you say your national office, can you -- can you tell me what your national office means?

A: The American Orthotic and Prosthetic Association, which is our trade --

Q: Is --

A: -- and business development association.

Q: Is that an organization that you belong

Page 14

to?

A: No, sir. That's a mem- -- the -- the companies -- firms are members of that.

Q: Okay. I'm not -- explain a little bit more, if you could.

A: Hanger would be a member. The company I most recently worked for in Fayetteville, Advanced Orthotics & Prosthetics -- or Advanced Brace & Limb, they -- they were a member.

Q: Okay. So --

A: And even though it -- I'm no longer affiliated with a member company, I'm a past president of AOPA and I'm past president of our academy, and they'll talk to me anyway. I've got, you know, friends.

Q: Sure you do.

A: That's what our industry is all about.

Q: Okay. Can you --

A: We talk to each other.

Q: Can you tell me specifically who you spoke with at your national organization when you called them for this case?

A: I was looking for a specific person, whose name is slipping me right now. He's the director of reimbursement. But I was unable to get

Page 15

him so I got an assistant --

Q: Okay.

A: -- that was -- was helpful. And but I -- I did not write down their name.

Q: Are you relying upon the information that you received from this assistant for the opinions that you intend to give in this case?

A: It supplements what I -- I felt like I already knew in terms of utilization.

Q: Well, can you --

A: I didn't -- I didn't get any conflicting information.

Q: Well, what information did you get?

A: Basically, it -- it was my experience and opinion that the use of this -- of the C-Leg was not the standard of care and it wasn't even used even 20 percent of the time across this country and Europe and basically got agreement. And they did some research and e-mailed me back or -- or called me back or whatever and supported what I felt like I already knew.

Q: Okay. Did you keep those e-mails?

A: No. I'm not sure I -- I'm -- said -- it might have been e-mail. It might have --

Q: Okay. So --

Page 16

A: I don't -- I don't save a lot of e-mails. I generally delete them. If they're important, I put them into folders.

Q: Well, what I'm trying to figure out is I believe you -- you intend to provide opinions with respect to the standard of care for prosthetic legs utilized in this country?

A: Yes.

Q: Is that co- -- okay. Now --

A: An -- an opinion.

Q: An opinion, right. And you said that the use of the C-Leg was or was not the standard of care?

A: It -- it is not close to the standard of care. I think it's -- the -- the C-Leg is -- is above and beyond the standard of care by a large measure.

Q: Above and beyond. Did you rely upon your conversation with this assistant at the national organization in order to reach this opinion?

MR. VANGEISON: Object. I think he's already answered that, but you can -- can do it again.

A: Again, I -- I was looking for support or total disagreement. No, you need to wake up; you

Page 17

know, this what's happening out there.
Q: Would it be fair to say that when you were initially contacted to render an opinion in this case, that you weren't confident enough regarding whether the C-Leg was or was not the standard of care, which is why you sought out additional information?
A: I was -- I was very confident.
Q: Very confident.
A: I've been in this profession for 40 years and worked in --
Q: And --
A: -- numerous places.
Q: You were ver- -- I'm trying to figure out why did you then reach out to someone else if you were very confident?
A: I'm -- I'm always looking for information. I'm --
Q: Did you make notes of the conversation that you had with this person at your national academy?
A: Not that I have available. I don't recall making notes.
Q: And you don't have any of those with you?
A: No.

Page 18

Q: Okay.
A: Definitely.
MR. VANGEISON: He -- he has notes, but not from that conversation, correct?
THE WITNESS: Yeah, I -- yeah, I have notes from reading the deposition transcripts.
Q: Okay. We'll get to that in a second. We're talking about notes from this conversation --
A: No.
Q: -- with --
A: No.
Q: -- with an assistant from the national academy. Now, is -- is --
A: I was just looking for guidance to make sure that I wasn't off base and missing something.
Q: Okay. Now, is that -- you only spoke to one person at the national academy?
A: The national association.
Q: National association. Would that be true?
A: And I spoke to various friends around the country that are area managers for Hanger.
Q: Okay. Let's just talk to the national association. Only one person there?
A: Yeah.

Page 19

Q: Was that one conversation?
A: One conversation with a return phone call.
Q: Okay. Do you know how -- how long you were on the phone with that person?
A: No.
Q: Okay. Do you know when that occurred?
A: No.
Q: Okay. Was it before or after you wrote -- submitted your written report?
A: It would have been after. I'm sorry. Before.
Q: Before, okay. Now, where did you get the percentage that you utilized on page 1 where it says, "The C-Leg prescribed, recommended and utilized in less than 15 percent of the amputation cases requiring a prosthetic knee"?
A: From experience more than the anything. I -- I attend our national and regional meetings. We have a tight network. We talk about what we're doing. I'm in touch with most of the leading edge prosthetists in the country. There's a limited number of people who do expert witness work. We speak on a fairly frequent basis. And these are typical topics of conversation.

Page 20

Q: Well, I'm trying to figure out -- 15 percent is pretty specific. Is it an estimate?
A: I can't -- I'd say, yes, it's my estimate and my opinion.
Q: Could it be as -- as much as 50 percent?
A: No.
Q: Okay. What I'm trying to figure out is how did you arrive at the figure of 15? If it's just by conversations -- did you look to any documentary evidence from any company that actually manufactures and sells the C-Leg to figure out how many C-Legs the company sells versus how many amputees there are in the United States?
A: Some -- some of the conversation that has occurred even outside of this case is the -- the typical number of above-knee amputees per year in the -- in the country, which I can't quote you. But -- and the typical standard of care, the direction that that standard of care is -- is taking in terms of what's acceptable, what's your -- as a practitioner, what's my argument for justification the insurance companies accept.
Q: Well, what -- what is a typical number of amputees, above-the-knee amputees in the United States per year?

Page 21

MS. MAGUIRE: Objection. Just asked and answered.
A: I -- I don't have that figure in front of me.
Q: Can you give -- is it 2,000, 5,000 --
A: I'd be --
Q: -- 10,000?
A: I'd be guessing.
Q: You'd be guessing. And then what I'm trying to figure out is if you can only guess at the number of total amputees, above-the-knee amputees that there are in the United States, and you're only guessing at that number, how do you get from that number that you're guessing at to the 15 percent if you don't know the original number?
A: I spent a year with a company called SPS in Alpharetta, and my job was to develop a clinical education team. SPS was the world's largest distributor of prosthetic and orthotic components, and they were starting to sell a lot of microprocessors. And the clinical -- the goal of the clinical team was to train onsite first-time purchasers of given microprocessors.
During that year, I traveled all over the United States. I went to probably a hundred-plus --

Page 22

more than that -- facilities and did personal onsite training and fittings. And in the course of that year, I learned a lot, asked a lot of questions. Again, this is my opinion. I didn't say I had a hundred percent fact to back it up.
Q: That's what I'm looking for, the facts. Which year did you work for SPS?
A: 2011 to 2012, June to June.
Q: Do you have a copy of your recent C.V. with you?
A: No. I assume since I didn't get the -- what do you call it, duces tecum --
Q: You didn't get the Notice of Deposition?
A: Yeah. I assumed you had that anyway.
Q: Okay.
A: I can provide that if needed.
Q: It would have been -- it would have been helpful, but let's go back. So you recently were employed by SPS 2- -- between 2011 and 2012. Were you a consultant or a full-time employee?
A: I was a full-time employee.
Q: And what was your job title?
A: Direct- -- director of clinical and technical education.
Q: Okay. And you went to over 100 sites; is

Page 23

that correct, 100 facilities?
A: Again, I di- -- don't have the -- a factual count in front of me, but that would be my estimate.
Q: Okay. And --
A: I traveled all week long from facility to facility.
Q: What type of facilities did you travel to?
A: Clinical patient care, just like Hanger.
Q: Okay. Now, is SPS a provider of orth- -- orthotics or prosthetic devices?
A: No. They --
Q: Okay.
A: -- they're the world's largest distributor of other manufacturers' components, supplies, equipment. Anything related to prosthetics and orthotics, --
Q: They don't make them --
A: -- they -- they sell it.
Q: They don't make them; they sell them?
A: No. They're not a manufacturer.
Q: Got you. Okay. Now, and what we're -- what we're talking about in this case is above-the-knee amputation prosthetic devices. And

Page 24

can you tell me for the year 2011 to 2012 how many of those devices were sold by SPS?
A: No.
Q: Can you tell me during the year 2011 to 2012 how many amputees SPS fitted for any type of a lower-leg prosthetic?
A: Well, SPS wouldn't have been fitting them. We -- we go attend -- the way the -- the program worked was the prosthetist did his work up from and we attended when he was ready for fitting. And if there were existing problems in fit and alignment, we offered suggestions for improvement. Sometimes you couldn't move on with the microprocessor until you got the foundation correct. But I'm -- the primary role is to train them in Bluetooth connection, software loading and utilization, and then the communication between the software and the -- the microprocessor knee.
Q: Okay. And can you tell me from the year 2011 to 2012 how many lower-leg prosthetic devices SPS actually sold for amputees? Don't remember?
A: I have no clue. It would be -- when you say devices, you mean components?
Q: Right.
A: Yeah. When -- there's so many different

Page 25

components. We carried over 130 different kinds of feet. We carried probably at least five microprocessor knees, and there are other hydraulic knees, pneumatic knees. There -- there's probably 200 different kinds of knees that are available. So when you say components, the numbers are just -- that -- that wasn't in my purview.

Q: Okay. So --

A: But I know that for years they've been the world's largest distributor.

Q: Okay. So you weren't privy to the sales numbers?

A: It wasn't relevant for what I was doing.

Q: Got you.

A: And I'm not a -- I'm not a sales number guy.

Q: Okay. What --

A: I would hear them in the meetings because I was on their leadership team and I would hear the reports, but it -- it basically wasn't in my purviews. Like when I gave my report about clinical stuff, the sales people went to sleep.

Q: Okay. I got it. So -- and I'm just trying to figure out -- you said that you gained experience when you -- when you were trying to reach

Page 26

your 15 percent calculation, that you gained experience by working at SPS. But the experience that you gained at S -- SPS didn't help you to crunch the numbers in order to get that percentage; would that be a fair statement?

A: Not crunch numbers. It -- it helped me develop an opinion and a ballpark feeling. I'm the curious type and be -- having been called for expert cases before, I saw it as an opportunity to -- to learn -- learn myself and not just go teach. So I was constantly asking questions about what else are you doing besides what you're doing through SPS? What other knees are you using? How many out -- out of the number of amputees you see in a year, above-knee, how many microprocessor do you fit? Have you done any microprocessor ankles? Did I take statistical numbers? No.

Q: And -- and you don't recall those numbers as you sit here today, do you?

A: No.

Q: Okay.

A: Like I say, it helped me develop a professional opinion.

Q: Now, was your role at SPS in the field of a marketing agent?

Page 27

A: No. We had sales reps or sales managers. We traveled with them. They would choose -- the company that wanted our assistance would put in the request through the sales rep, who would bring it to me and the vice president of marketing, and we would decide which of my team went where and when and we traveled with the sales rep.

Q: Okay.

A: Because sometimes I didn't know the -- the owners of the facility or the practitioners where I was going. Most of the time, I already knew them, but --

Q: Did you ever participate in the actual fitting of the lower-leg prosthetic device?

MR. VANGEISON: You mean --

Q: From -- from 2011 to 2012.

A: Yes.

Q: And --

A: And --

Q: -- on how -- how many occasions?

A: When -- when -- when you say "fitting," that's a term that most non-practitioners don't understand the ramifications. The initial fitting comes from casting, devel- -- modifying the model, whether you do it with hands or by a CAD-CAM;

Page 28

developing a test or diagnostic socket and typically putting that together, constructing it with the components in a static alignment, a -- a starting point. You fit the patient -- we -- we always ask that they get at least to that point. We hopes [sic] that they would do a dynamic alignment. That's still fitting because what you see statically may change dynamically. And you may decide to make a change and go to another test socket.

On the better practitioners that we worked with, their foundation was good. We went in. We did the microprocessors, the high-end stuff, and we -- we -- we had a good result from the programming and the amputees walked great and we didn't have to do -- go backwards in fitting.

All too often, we walked in and found disaster starting points that defied the biomechanics built into the microprocessor needs. In other words, we couldn't program it because there were too many inherent errors in there. So we would go back -- I often stayed longer or went back and as a friendship service. It wasn't what SPS wanted me to do, but I couldn't help them get a result with the microprocessor if we didn't start over and refine their socket design and their alignment or

Page 29

foundation.
Q: Okay.
A: So I did both.
Q: So you weren't -- you weren't employed to do the initial socket measurement or casting, correct?
A: Correct.
Q: You would show up, hopefully after all this was done and after the patient had the socket in place, and you were to analyze how well the leg worked for that patient, generally speaking? I know it's not --
A: Ideally speaking, I didn't have to analyze it. It was right.
Q: Okay.
A: But often I -- you know, you had to be tactful because you -- you're not there to criticize their work but, I'm sorry, I can't program this thing because your biomechanics are so shoddy, we're wasting or our time.
Q: And --
A: We won't get a result, so.
Q: And -- and how many patients do you believe during that one-year period that you actually saw and worked with for the lower-leg

Page 30

device, lower leg --
A: Lower-leg or above-the-knee?
Q: I'm sorry. Above-the-knee.
A: Because we also did foot and ankle.
Q: Right. The -- the above-the-knee is what I'm --
A: That was the predominant reason for us going out. That's the most commonly used of the microprocessors. So I'd say if I went to a hundred facilities, probably 70. Again, no hard data.
MR. VANGEISON: Just -- just so the record is clear, you're talking 70 would have been above-the-knee?
THE WITNESS: Above-the-knee.
MR. VANGEISON: All right.
THE WITNESS: Using -- utilizing some form of microprocessor knee. MPK, they call them.
Q: Okay. Is there -- is there anywhere else that you claimed you got experience for which you base your 15 percent --
A: Well, again, I'd mention to you that we network a lot as experts. We network in our a- -- academy and asso- -- academy is our academic group that I've already told you about, AOPA, the trade

Page 31

association. We have regional meetings. We have manufacturers' workshops. We're -- we're constantly interfacing with each other. I've worked in numerous places. Microprocessors have been around since the '90s. That's getting close to 20 years that I'm --
Q: Yeah, but I'm trying to figure out how -- is there anywhere else you were able to crunch the numbers to actually --
MR. VANGEISON: Well, he told -- told you he talked to Hanger and you cut him off. So maybe that's another area.
MR. GASTON: I'm -- I'm get- -- I'm -- I'm getting there next.
MR. VANGEISON: Okay.
Q: But where you actually were able to crunch the numbers for --
A: I did not crunch numbers. A- -- again, I'm -- I'm telling you this is my opinion based on lots of years of experience and exposure and networking.
Q: Okay. Who did you speak with at Hanger?
A: Various area man- -- managers. I mean, lots of people.
Q: Can I have some of their names, please?

Page 32

A: I can't remember all the names. We have a Hanger ed fair, which is like a national meeting. They probably bring in 1,500 practitioners.
Q: Well, what --
A: So to call certain names and say I spoke to that individual about this, I'd be guessing. But as I sat through a microprocessor course, obviously, the conversation is are you fitting these? How many? On who? What age group? It's just typical networking and interaction. And what goes along with that is I'm pretty much a sponge. If you look at my C.V., I've published. I've done lots of presentations. I've always been very curious. And I have pretty good mental recall.
Q: What -- what I'm int- -- what I'm interested in --
A: But I'm not a st- -- statistician.
Q: What I'm interested in, sir, is for this case you testified that you reached out to some of your friends at Hanger to talk to them about the standard of care, to talk to them about the number of these devices that they are selling for amputees. What I'm trying to figure out -- can you tell me the name of one person who --
A: Michael Tompkins would be.

Page 33

Q: Michael Tompkins. And what -- he -- is he the area manager?
A: No. He is the vice president of technology.
Q: Vice president of technology, okay. And what did Michael Tompkins tell you?
A: I didn't write it down.
Q: What do you recall?
A: We -- we discussed how frequently Hanger's -- how fast are they moving forward with their microprocessor program, as they call it, because Hanger is on the leading edge. If they're doing 30 percent, then I know there's no way the rest of the country is even close to them.
Q: All right. And what -- what --
A: But we didn't talk specific numbers. We talked about their program, who's involved. I happen to know that the Genium is the latest thing on their -- their agenda.
Q: Is it -- is it To- -- Thompson?
A: Tompkins.
Q: Tompkins. And when -- what month did you speak to Mr. Tompkins?
A: I speak to him frequently.
Q: When -- when was the --

Page 34

A: When the report --
Q: -- the month that --
A: -- was written, if we got into specifics about the report or what I was looking for -- and I'm not sure I told him. Actually, a lot of this information is HIPAA protected, so I don't talk about it in specifics. I -- I'm fishing. The report is dated 3/3, so probably -- I know he called me right around that time because it's my birthday. But I generally speak to him almost every month, every other month, some months three times.
Q: And for -- and what information did you ask him specifically for this case? What did -- what -- what did you tell him that you needed for this case?
A: Well, I didn't tell him I was looking for specifics on a case. I asked him how much did he feel that my MPKs had pervaded the Hanger clinical program.
Q: What is MPKs?
A: Microprocessor knees.
Q: How much that the MPK knees --
A: Had become a -- a frequent part of the Hanger program. In other words, was it anywhere near -- I -- I didn't ask him to use the word

Page 35

"standard of care," but is it becoming standard fare because I know that -- that the guy who wrote the report, Dale Berry, he pushes it. His job is to push MPKs and to help you get it approved by insurance companies. So they have an aggressive program, which puts them above and beyond most practitioners in this country, or other companies.
Q: Did you ask him how many of the microprocessor knees he sold in 2012?
A: He wouldn't know.
Q: Did you ask him?
A: No.
Q: Did you want to know?
A: If I need that data, I can find that from SPS individuals if -- if I need what Hanger bought because everything that Hanger buys has to be bought through SPS, even if it's bought directly from Otto Bock.
Q: So all the microproc- --
A: I can find that information if I wanted it. I -- I mentioned, I think, that I'm not a statistical person. I'm looking for ballpark feel and either rejection of my opinions or agreement.
Q: Everything that Hanger sells has to be first purchased through SPS?

Page 36

A: (Nods head affirmatively.)
Q: And -- and what's --
MR. VANGEISON: He wa- -- he was just nodding.
Q: Is that -- is that true, --
A: Yes.
Q: -- sir?
A: That's correct.
Q: Okay. And is SPS an acronym for three words?
A: It used to be Southern Prosthetic Supply.
Q: Okay. All right. And where does --
A: And there's a history there, but I won't bore you with it unless you want it.
Q: Not really. But what I'm trying to figure out is --
A: They are a division of Hanger.
Q: They're a division of Hanger, okay. All right.
A: Hanger has diversified. They're not just -- Hanger Clinic is their patient care prosthetic and orthotic care. They have about four or five divisions. SPS is their distribution -- their only distribution operation.
Q: All right. So you didn't -- you didn't

Page 37

ask Mr. Tompkins how many of the microprocessor above-the-knee prosthetic devices that Hanger sold in 2012?
A: He wouldn't know.
Q: I'm just -- again, you've got to --
A: No. I did not ask him.
Q: How about 2011?
A: No.
Q: 2010?
A: No.
Q: Do you know -- now, with the microprocessor leg that we're talking about, is that also called the C, the letter "C" as in "computer" leg?
A: The C-Leg is one of about four or five what I call legitimate microprocessors. There's another three or four that claim the fame, but I'm not a hundred percent sure.
Q: Okay.
A: Practitioners are doubtful about that second tier.
Q: And are you aware of when Hanger first started selling the C-Leg?
A: I'm sure that when -- when it first became available in the late '90s.

Page 38

Q: Late '90s?
A: Yeah. They were in their current form. They've changed their name from Hanger Prosthetics and Orthotics to Hanger Clinic. But they were publicly owned back then and their -- so their aggressiveness would have been similar to what it is today.
Q: All right. Now, when you asked Mr. Tompkins how much did he believe that the microprocessor knee had been in the forefront of the Hanger program, what did he tell you?
A: That certainly it's growing a lot and their -- that Dale Berry's office is very aggressive, but he didn't feel like it was anywhere near 25 percent of their typical clinical fittings.
Q: Now, you'd have to -- we have to explore this a little bit more. We're talking about clinical fittings for above-the-knee amputees, correct?
A: Correct.
Q: So --
A: And theoretically, they're very rare. But theoretically, hip disarticulations, hip amputees could utilize microprocessor knees.
Q: Now, Mr. Tompkins told you that -- that

Page 39

the above-the-knee prosthetic devices that he sells for above-the-knee amputations --
A: He doesn't sell them. He's the vice president of the technology.
Q: Hanger. I'm talking about Hanger, his group. And what -- what I'm talking about, when you -- when you said you spoke to Mr. Tompkins and he said that the microprocessor knees, as a part of Hanger's program, didn't come up to even 25 percent of the knees that Hanger is providing for above-the-knee amputees. Did I get that right?
A: I didn't ask him -- I didn't offer a percentage. I told him that --
Q: All right. Well, you offered me a per --
A: -- that I was dealing with this situation -- I don't even know if I called it a case -- where the claim was made that it was -- the C-Leg was the standard of care. And certainly the C-Leg doesn't have the market cornered. There's -- there's other microprocessors that are newer and some, in my opinion, are more advanced. But I was looking at his feel for the integration of microprocessors within their clinical mainstream, which he has a big pulse on. He travels a lot from facility to facility. You know, again, it's networking.

Page 40

There's certain people that you would call that you know have their -- the pulse on a certain legal issue, and there's certain ones you wouldn't bother because their expertise is somewhere else.
Q: And -- and Mr. Tompkins would know more about this particular area than you would know, correct?
A: Yes. Within Hanger, yes.
Q: Within Hanger, right. Now, --
A: Probably the one who knows the most would be Dale Berry.
Q: Okay. And you said you weren't asking for a percentage, but you gave me a percentage. Where did you come up with the 25 percent?
A: He -- he -- that was his answer.
MS. MAGUIRE: That wasn't his number.
Q: That was his answer?
A: Yeah.
Q: Okay.
A: He said certainly they haven't pervaded, was the word I think he used, integrated, as even a quarter of all the patients they see that are above-knee or knee-requiring amputees.
Q: Okay. If he gave you the 25 percent, why

Page 41

did you reduce it to 15 percent in your report?
MR. VANGEISON: I think it's asked and answered, but you can tell him again.
A: He said not even 25 percent, was his term -- terminology, not even 25 percent, which I take to mean it's less than. And I know, again, from experience, and my -- my feeling, where I've worked the past few years, the number of years I was at Duke and the types of opportunities we had there, we certainly saw more and younger traumatic amputees who were the types of candidates for microprocessors at Duke than about any other place that I could work.
So based on my experiences, conversations with him, and knowledge that if Hanger is not even at 25 percent, the -- the rest of the profession is way behind, because they are. They're not nearly as aggressive. They don't have a Dale Berry working full-time to get insurance authorizations. It's also a cash flow thing. If you do a microprocessor and it's denied by the insurance company, you just got kicked in the teeth for 20,000 bucks or more.
Q: And that's a big problem because if -- if --
A: Hanger has the cash flow. They can --

Page 42

Q: And if -- and if -- and if the -- the company submits the approval for the knee and it's denied, then that's not a good thing, is it?
A: Well, if it's denied, you don't do it.
Q: Right.
A: And some insurance companies will give you preauthorization. Medicare is our benchmark. They will not give you preauthorization. So you're gambling if you put a C-Leg or any microprocessor on a Medicare patient.
Q: Now, has it been your experience that the persons -- the majority of the persons who get C-Leg, that -- that the device is paid for by either Medicare or Workers' Compensation insurance?
A: No. The C-Leg is -- they've -- they've done a very good job, more than the others, of making insurance companies understand their benefits. So with appropriate justification like their PAVET form, Hanger's PAVET form, which was, you know, referred to in the deposition by Greg Sachs -- that's an assessment form.
There's also the amputee mobility predictor, which was a Ph.D thesis for Bob Gailey who's a doctor in physical therapy at Miami. That's an accepted assessment tool, but it's still at a

Page 43

very intimidating and risky level.
So -- and one of the requirements from -- from day one for any hydraulic unit is you have to be able to walk at varying cadences or speeds. And microprocessors are just advanced hydraulic units. So if you don't pass that litmus test, which most above-knee amputees can't do -- a lot of them can't do. I'm not going to say most, but certainly the minority of the patients I've seen over the years can change walking speeds. The majority cannot. So they don't past that litmus test.
Q: All right. In order -- and is there certain levels of mobility that an amputee has to fall into in order to be even considered for a C-Leg or a Genium leg?
A: There are Medicare-established and the insurance companies adopted a functionality program of zero through four.
Q: Four, right.
A: So there's five categories.
Q: Okay.
A: Why they didn't start with one, I don't know. Zero implies zero, so it makes sense. But they're called K levels.
Q: Right.

Page 44

A: They're totally accepted across the board.
Q: Okay.
A: Any prosthetist that can't discuss it shouldn't be seeing patients.
Q: And in order to be considered for a C-leg or a Genium leg, you'd have to be a level three or four category; would that be a fair statement?
A: Three is --
MR. VANGEISON: I object. To be considered by whom for a Genium or --
Q: Well, in order for the -- the prosthetist whose evaluation -- evaluating the patient -- in order for the prosthetist to recommend a C-Leg or a Genium, the amputee would have to fall into a level three or level four category; would that be a fair statement?
A: Yes. A K3 is the minimum requirement.
Q: Okay.
A: I don't want to elaborate too much, but there's controversy over who should be assigning the K levels. Obviously, it's in the prosthetist's interest to upgrade that K level if they want to put them in a C-Leg. I generally had physical therapists or physiatrists work with me in doing the

Page 45

assessments to try to establish K levels.
Q: Do you have any problem with the K level that was assigned by Mr. Sachs for Mr. Tolson?
A: No, sir.
Q: Okay. All right. Now, does Medicare keep statistics of --
A: Oh, definitely.
Q: Okay.
A: And they would be available if I was a statistician or --
Q: Right.
A: -- or if I'm informed that I need to find that information.
Q: You're anticipating my next question. Would it be fair to say that you did not go to the Medicare Web site to see how many of the microprocessor knees that Medicare approved for -- in 2010, 2011 and 2012?
A: I did not.
Q: And -- and even in the Medicare Web site, they do have a distinction between the types of microprocessors for the knees, correct?
A: I would think not because they basically put out a -- a policy that all microprocessors would be coded -- they would only accept four or five

Page 46

codes. I can't remember the exact number. And the codes don't put brand names on them. So I don't know how they would have that data unless they did chart reviews on every single patient done to see whether it was a Plie or an Orion or a C-Leg. So the codes do not discriminate between the -- the various available microprocessors, so they would be all lumped together.
Q: All lumped together?
A: Including the Genium. The Genium --
Q: So --
A: -- is coded by Medicare and the insurance companies very clearly because it -- it was a kick in the teeth to a lot of people. It cost a lot more money to the prosthetist, so they basically said we're -- it's the same codes as the C-Leg, as the Orion, any micro -- MPK. These are the codes. Don't send in extra codes or wildcard codes. And a wildcard code is what some companies use with a 999, last three digits, meaning not otherwise designated.
Q: Okay. Do you know the code for the C-Leg?
A: Not off the top of my head.
Q: Do you know the code for --
A: I mean, I --

Page 47

Q: -- for the more advanced unit other than the C-Leg?
MS. MAGUIRE: Objection.
A: I'm sorry?
Q: Is there a Medicare code for a more advanced leg other than the C-Leg?
A: Not that I'm aware of, no. As a matter of fact, I know there isn't.
Q: Okay. And can you --
A: I have a piece of a paper -- we have so much data to keep up with, I -- I don't try to memorize codes. It just clogs my hard drive so I have cheat sheets so I can find those codes quickly. And I'm sure it's in Dale Berry's and Gregory Sachs' report.
Q: Okay. And you did read Mr. Berry and Mr. Sachs' report for --
A: Yeah. And I went to make sure that those codes were the correct codes, and they were.
Q: They were, right?
A: Yes.
Q: Okay. All right. Now, the C-Leg has been around since the 1990's?
A: '97 is when it was introduced to the United States.

Page 48

Q: And when was the Genium first available for any amputee?
A: I don't know the exact date. I want to say sometime in 2010.
Q: It's my understanding that the Department of the Defense asked for persons in the industry to consult with them to try to develop a more advanced knee for a military personnel who suffered amputees and that's how the Genium became developed.
A: My understanding is similar. Typically, the -- the Department of Defense and DARPA and those guys, they -- they go to Johns Hopkins. They go to MIT. They go to Vanderbilt. And they tell them what they want. They deal with the engineers and the scientists. Companies that are aggressive like Otto Bock go to the DOD and say, "We want to work with you," and they're not going to tell them no. But they didn't go to Otto Bock to develop -- ask for the Genium.
Q: So regardless of who went --
A: And -- and --
Q: -- to who, it was a -- it was a --
A: It was a collaborative affair.
Q: And were you -- did the DOD or anyone from the -- the military seek you out for your

Page 49

advice in -- in the form of a consultant when they -- when the Genium was developed?
A: No.
Q: Have you ever worked as a consultant for the Department of Defense?
A: Not the Department of Defense.
Q: Have you ever worked as a consultant for any governmental agency with respect to the -- providing them advice regarding the development of more advanced microprocessors for knee prosthetic devices?
A: I was involved with -- invited as a -- a speaker and consultant for a symposium on advanced technology where we all submitted white papers.
Q: When was that?
A: But I -- I don't recall. It's on my C.V.
Q: Do you remember --
A: It would have been more than ten years ago.
Q: Okay.
A: But a lot of what we recommended in that symposium is what's happening today, fueled by Iraq and Afghanistan.
Q: Okay. Did you originally retire from clinical practice around 2009?

Page 50

A: I took -- I had a hiatus.
Q: Did it begin in 2009?
A: The beginning of 2010.
Q: 2010. And then from 2010 --
A: Essentially I -- I wouldn't call it retire. My mother was dying in this area --
Q: I'm sorry to hear that.
A: -- and I was in a -- a practice, a partnership, and I actually caught my partner cheating on Medicare, which, as a partner, I'm just as liable as him and I'm not going to jail, and I'm not going to lose my Medicare privileges. So we duked it out and I had to walk away. So my mom dying, my consulting business was doing well; I stayed in the area until after she passed, and then that's when I went to SPS.
Q: Okay. Was it -- the year -- was the year-long employment with SPS a contract position?
A: No.
Q: Okay. Why did you leave?
A: I was recruited by a guy that I knew from the old days of SPS. It used to be a family-held organization, still Hanger. Hanger used to be family-held divisions. There were four of them. And gradually over the year -- the S -- the Federal

Page 51

Trade Commission broke up the original conglomerate in the '20s and they went into four different regions.
And I had worked for Hanger Southeast owned by two families, and I knew the guy who had grown SPS into this unbelievably great operation. Well, the families gradually started selling back to the public Hanger. One of the -- the Hanger out of Washington, D.C. went public back in the '90s, maybe earlier, '80s. And gradually, the FTC sat back and watched as the whole conglomerate got thrown back together and is even bigger than ever.
So Ron May, who was a friend of mine, was the president of SPS, and he had this dream and had kind of dallied with non-qualified people developing a clinical ed team. And when he found out I was available -- because I interviewed for management positions with Hanger, and the word got to Ron, and he said, "I'd love to have you at SPS helping build this team."
Well, he retired. Didn't tell me he was going to retire, but he retired about half to two-thirds of the way through. And my new boss was totally different philosophy, very corporate. Hanger used that -- even though Hanger owned SPS

Page 52

when I got there, they were still run by Ron and SPS, and I was on the leadership team. We made the decisions and Hanger stood in the background. When the -- the new president came in, Hanger used that as a perfect opportunity to insert itself more corporately and the whole culture changed.
Add to that that I didn't like Atlanta or Alpharetta. I have a fishing boat up here in Morehead City. My wife was working up here because of her career. She's in a pension situation working for the state. She's on the tail end and is not going to lose the additional time for her pension. So all the things added up to where I just said I've got the team where it can go forward without me and I left. So --
THE VIDEOGRAPHER: Counsel, we have -- we have about two and a half, three minutes left on the tape.
MR. GASTON: Let's go ahead and switch the tape now.
THE VIDEOGRAPHER: All right.
MR. GASTON: Thank you.
THE VIDEOGRAPHER: We are off the record at 1:04 p.m.
[RECESS - 1:04 P.M. TO 1:06 P.M.]

Page 53

THE VIDEOGRAPHER: We are back on the record at 1:06 p.m.
Q: Okay. From the time you left SPS in 2012, have you worked anywhere else?
A: I started as a consultant a few months later at Advanced Brace & Limb. I was a contract employee. And --
Q: Where -- where are they located, sir?
A: Fayetteville, North Carolina.
Q: What was your position there?
A: I was the -- initially as a consultant. I was the fill-in prosthetist. Their prosthetist hadn't worked out and they had to get rid of him, so I was filling in. And I also did secondary or- -- orthotics. They had a -- a senior orthotist, but I -- his case load was big enough to where I -- I did that too. And I started building their business. And we agreed that we liked each other, so they offered me a staff position in February.
Q: February 2013?
A: Yes.
Q: Okay. And --
A: Because I would have gone there as a consultant in November of 2012.
Q: And what staff position were you offered?

Page 54

A: Chief prosthetist and certified orthotist or backup orthotist.
Q: Okay. Since your employment with this new employer, have you actually fitted patients with the C-Leg?
A: No. My preference was another microprocessor.
Q: Okay. What's that?
A: Plie from Freedom Innovations.
Q: How do you spell that?
A: Pli- -- P-L-I-E. It's a ballerina move.
Q: I wouldn't know about that.
A: I wouldn't either if they hadn't told me.
Q: Plie. And who -- and who -- and who makes the Plie system?
A: Freedom Innovations located in southern Orange County, California.
Q: And why did you decide to go with the Plie processor?
A: Well, after that year with SPS, I was -- I was already C-Leg certified. I was already RHEO certified. I was already -- which is by Ossur. I was already certified in the Plie 1. And then I got exposed in greater detail to all of them and had access to their top clinical ed team and their

Page 55

engineers. And I learned enough to where, in my opinion, the Plie was far and above, in my opinion, and -- and my -- my clinical team agreed with me. It offered more parameters and more fine-tuning programming capability than the others. But I did use others, the Orion.
Q: You ever used the -- or have you ever fitted someone for a Genium knee?
A: No, sir.
Q: Is there any reason why?
A: I haven't really had a reason for me to get certified in the Genium. SPS did not distribute those products for Otto Bock, so I wasn't trained -- I was already -- had been trained in the C-Leg. But -- so I didn't have -- and the -- the time -- period of time I was there, I'm not sure where Otto Bock's training was. It was still known that the Genium was mostly military and -- what's the hospital, the military hospital in --
Q: Walter --
A: -- Washington?
Q: Walter Reed?
A: Walter Reed. And then the place in San Antonio, the Center for the Intrepid. For me to -- at -- at Advanced Brace & Limb, I would have, one,

Page 56

had to have a candidate, an amputee. I would have to take them and me and go to Minneapolis, take a four or five-day training course that would probably cost in the neighborhood of -- it -- they charged me when I did the C-Leg about 2- to $3,000, plus costs while you're up there. So without having a candidate that would bring reimbursement, there was no point.
Q: Okay. So it would cost you money to be educated. And would you be ed- -- what -- what company would you go to in Minnesota in order to be certified to fit the Genium knee?
A: Otto Bock.
Q: Otto Bock?
A: Uh-huh. The same company as the C-Leg.
Q: Okay. All right. Is the P-L-I-E leg more advanced than the C-Leg?
A: In my opinion, yes. It offers more parameters, more programming options. They have, like, ten advanced parameters. It has a wizard that auto programs if you want to be lazy. Or you can modify some of those settings yourself if you see -- it has a split screen with all kinds of graphics which show me forces and acceleration and knee angle and all kinds of data that is very helpful. It's

Page 57

hard to learn how to read it and pick it up in -- in real time because it's happening real fast. You know how fast we walk.

But it gives me feedback to where I might modify what the wizard set. The wizard is based on taking it through normal speed walking, slow speed walking, fast speed walking, and they have to have enough consistent steps. They can't just be shuffling behind a walker. They have to have good steps to get a step count high enough to -- for the data to be relevant to the program. Then it has ten extra parameters that I can go into to fine tune certain issues that may arise.

Q: All right. Let -- let's -- let's go back a little bit. The C-A -- I'm sorry -- the C-Leg has two programmable modes; is that --

A: Correct.

Q: And how many programmable modes does the Plie have?

A: Well, the -- the -- the context in which you're taking about them, they're -- that's not the way you would compare them.

Q: All right. Why don't you -- why don't you compare for me the differences between the C-Leg and the Plie? I know you went over some of these,

Page 58

but if you could just be more specific, if you could. What -- what can a person with a Plie leg do that a person with the C-Leg can't do?

A: Probably nothing in terms of absolute function, but I can fine tune certain functions. Now, to kind of go back to the C-Leg, --

Q: Explain all you want to.

A: -- they -- they have two modes.

Q: Uh-huh.

A: You use a key fob. One is the program mode for normal walking, foot over foot, down stairs, hills, ramps, stepping over people, all the things that all the microprocessors do. If you go into your secondary mode, it could be free swing for riding a bicycle so you don't have to trigger the knee to release it. It's -- it's released all the time. But there is no stance or stability enhancement in that mode. So when you get off your bike, you'd better be careful.

Q: Okay.

A: Or you can program it to lock and not bend at all. When I say the parameters or -- or options for the -- for the Plie, I'm basically programming for the same functions, variable walking speeds, ramps, stairs, foot over foot.

Page 59

Q: Foot over foot. The Plie can do a foot -- step-over-step movement?

A: Step over step downhill. That's --

Q: How about --

A: -- that's all --

Q: How about --

A: -- any of them do.

Q: How about up hill?

A: No.

Q: The -- but the C-Leg, you can't -- the C-Leg is not a -- a step-over-step --

A: Up --

Q: -- device, correct?

A: It is not.

Q: Okay.

A: But in your video, there are amputees that are coordinated and strong enough to where they can do it pulling on a rail. He didn't fool me. I've seen -- he's the 1 percent amputee out there. It's not the Genium in that video that's going -- it's not a power knee. Neither is the C-Leg, the Plie. They all have what's called yield resistance.

So if you load it with the knee bent, it's going to provide maximum resistance without locking. It can only lock at 180 degrees. So if

Page 60

you misstep and your knee is bent, in an old-fashioned prosthesis, you'd buckle and hit the ground in about a split second. It goes to high yield to allow you stumble recovery, to allow you to gently go down the stairs, to sit down with resistance from the prosthesis. And if you're adept and athletic, you can load that knee on the stair in front of you, and because it's on high yield, if you're strong enough to pull that -- that -- use that butt muscle to extend that knee and pull on the rail, which is what that guy did, you can go up stairs foot over foot.

Q: Okay. But the C-Leg doesn't allow that type of a movement, correct?

A: That particular amputee might -- could --

Q: I'm -- I'm talking about the C-Leg that Mr. --

A: Doesn't --

Q: -- Tolson is wearing now doesn't allow for step-over-step ambulation, correct?

A: I'll qualify that by what I answered before. With the correct amputee, it does not provide power. It does not -- none of them lift you up the stairs. But because of the yield, you can land on the tread in front of you with the knee bent

Page 61

and it -- it -- you're basically strong enough to begin defying gravity. And that amputee in the right-hand video didn't weigh 230 pounds and he's pulling on the rail. All those things added together, that amputee could do in any microprocessor knee.

Q: Any microprocessor knee --

A: They all have stance yield when the knee is loaded in flexion, either from a misstep or intentionally, you know the method of going down stairs as you put your heel on there so that the toes never load. The toe has to be loaded for the knee to go into free swing. So if you don't load the toe and you start bending the knee to -- to put your other leg down the sta- -- the tread to the next step down, any of those knees goes into high yield, slow res- -- progressive lowering so that you don't buckle.

Q: All right. You're going to have to explain something to me. The C-Leg, the knee joint is either locked or free swinging, correct?

A: It's more than that.

Q: But, I mean, the -- the two methods -- the two motions with the C-Leg, it's either free swinging or you can put it in a locked position,

Page 62

correct?

A: You can put it in the locked position with the key fob.

Q: Right.

A: If you -- that -- if you choose that to be your second mode. When you're walking, the C-Leg -- when the knee is fully extended and you land on the prosthesis in front of you with the knee fully extended, it knows where -- and all the knees are this way, all the microprocessors. It knows where it is in space. It knows the ground reaction forces. And it provides maximum resistance or maybe even lock, which essentially means the orifices in the hydraulic unit close off; fluid can't move so the knee won't bend. When you go through midstance and get onto the toe of any of these prostheses, it now knows that you're safe, that your other leg isn't -- when I'm on the toe of my left prosthesis, I'm generally landing on the heel of my right foot. So the prosthesis knows this from all the forces and all the sensory data. The -- the force sensors, the angle sensors, some are more sophisticated than others. Some have more of those than others. The Genium adds a gyroscope. But, anyway, when you load the toe, the knee now is in free swing.

Page 63

If you were to stumble with that prosthesis coming through and -- and it doesn't reach full extension, it goes to maximum resistance, the same thing it provides, what we call yield, high yield, the same thing it does when you're walking down a hill, down a ramp or going foot over foot down stairs, sitting down. If you don't load the toe and create a force that the knee senses, it will not unlock or go into free swing.

Q: Now, does the C-Leg have the ability to go into a free leg -- to interchangeably go in between free leg and locking while you're walking?

A: I assume you could punch a fob button and it -- if you're in the middle of a swing and -- and got the knee extended, that it would lock on --

Q: But --

A: -- the next step.

Q: But I mean automatically.

A: If you're walking good, it's locking at heel strike. If the --

Q: If --

A: -- forces all align correctly, it's smart enough to know -- the most unstable part of an above-knee amputee's gait is when they're on a heel strike, the leg is in front of them. That's when

Page 64

all the forces are -- you know what torque is? It's like a -- a clock. It's clockwise or counterclockwise. When you land on your heel, all the forces are trying to push your knee forward. That's the time where amputees had to really struggle or they had to be mechanically aligned so stable that their gait wasn't really smooth. That's the time when they fell most of the time. When you're on your toe and you go -- if you -- if you've ever watched an amputee in a social setting, they'll put their good leg in front of them and they're loading --

Q: And drag --

A: -- they're loading their toe, which reverses the torque, pushes the knee back against the extension stop. So it locks on a good step. It knows -- all those microprocessors do -- it knows if you misstepped, like you caught your toe in high grass or on a twig or shag carpet and it'll go to high yield so you don't bust your face.

Q: All right. What -- what I'm trying to figure out, it's -- it's -- it's a real more simplistic approach. When Mr. Tolson walks with the C-Leg, does he walk with it locked or does he walk with it in free stance, free swing?

Page 65

A: According to testimony, the -- the video, he was not in his C-Leg. But according to Sachs' testimony and to Tolson's, he walks with it in normal mode, which means whatever it's been programmed for him to do. So it's in free swing when he steps correctly. It's in high yield when he's going down stairs foot over foot, high yield sitting down, high yield going down ramps, high yield when he stumbles. But when he steps correctly, loads the toe, the other foot is out in front of him, the forces -- the forces are gathered and the knee is so -- reacts so smart, it opens all the ports in the cylinder in the hydraulic unit, provides swing phase resistance, which is minimal -- much less resistance.

Q: Now, if Mr. Tolson were to take a couple of steps and then stand in one place, does the knee know to automatically lock in order -- does C-Leg know automatically to lock to give him more stability while he's standing in one place, or does he have to man- -- manually lock it?

A: If he wants a mechanical lock that you cannot break, he has to do it with the fob, and that has to be the second mode. If the -- the second mode was for free swing to ride a bicycle, he

Page 66

wouldn't have that manual lock. When he's standing with the knee extended, the forces are such that it knows that he doesn't want to bend his knee unless he loses his balance.

Let's say you're fishing on a rocking boat and you're standing there. You know, one moment you're pitched forward a little bit. The next moment, you're pitched back. Now your weight is behind your knee. On a normal prosthesis, you'd be on your butt. On a C-Leg or any other microprocessor, it senses that this isn't a normal step. He's not stable anymore. Go into high yield resistance or safety mode.

Q: All right. My question was more specific. I'll ask it again because I don't -- maybe I'm not asking it correctly. When Mr. Tolson is walking, if he stops with his left leg that has the prosthetic device, the C-Leg, does the leg know to lock and to give him more stability before --

A: No.

Q: -- he makes the next step?

A: It is not a mechanical lock unless he pushes the fob.

Q: Now, my understanding is that the Genium does -- however, does allow that, that locking in

Page 67

order to give the patient more stability and the Genium knows when the patient then decides to take the next step to allow the knee to swing.

A: I think the terminology is the same. Lock is -- is misapplied in that situation. But it's not a mechanical lock to where -- it's a -- it's a hydraulic microprocessor controlled. To lock that knee, all you got to do is close all the ports. So if the forces are right on the C-Leg, the ports are closed and it won't --

Q: It won't move?

A: It's essentially locked. It's not the same as when you take that fob and mechanically lock it. The Genium doesn't really offer anything functionally that the C-Leg doesn't offer.

Q: Huh. And is that for all aspects of the walking?

A: Well, it has six modes. The C-Leg has two. None of the others use what they call modes. But I have much more programming depth and capability with a Plie, much less with the Orion. So they're all -- they all provide the same basic formula, that if you're walking good, it's hydraulically locked at heel strike. If you stumble, high-yield resistance. Going down stairs,

Page 68

ramps, high-yield resistance. Sitting down, high-yield resistance. They're all -- and the Genium doesn't bring anything more to the table other than a lot more gadgetry and more sensors. It has a gyroscope, so it -- it has a better sense of where it is in space, but that's not going to provide more function.

Q: Does the Plie provide more function than the C-Leg?

A: More -- more function in terms of des- -- activities or the things I've been describing, no. Better fine-tuning of those activities in, let's say, one of the issues going down the steeper the ramp on microprocessors, the jerkier it gets. It doesn't lower them enough. They have to -- they have to get their good leg out faster. The Plie allows me to fine tune that particular parameter.

Q: And have you found that the Plie has enough advancements over the C-Leg to the point where you will recommend a Plie for a patient who you believe can benefit from that?

A: The two patients that I saw that I fit with Plies initially, they were middle-aged strong ex-servicemen from Fort Bragg, and I -- I don't want to go into too much detail. One of the things that

Page 69

has been discovered or over time we've -- we've learned about the C-Leg is it's a very safe leg and it makes amputees lazy. And they have found -- the word has -- has spread, you know -- whether there's a journal article on it or not, I don't know. I know that Bob Gailey has talked about it, and he's -- he's a Ph.D. expert that works with amputees. But they found gluteal atrophy, butt muscle atrophy in C-Leg users. It -- it is a very stable and safe knee.

So if I've got an amputee that needs that safety, I'm going to recommend it. If I've got an amputee that I can set the knee up alignment-wise to be more -- require more voluntary control to where the amputee isn't just being lazy and relying on the -- on the microprocessor and the hydraulics but they're going to actively extend their muscles but they need the extra benefits of going down stairs, ramps, you know, all the other things; they need stumble recovery if they mess up but they're going to be using their muscles more to stabilize, then I'd recommend the Plie.

The other thing that you need to know and probably do is all the other microprocessors allow the choice of any foot. I can use an Otto Bock foot

Page 70

on a Freedom Innovations knee. Otto Bock restricts me to their feet, and that affects my decision-making.

Q: Now, so you mentioned something very important, that you said if the patient's safety -- for the patient's safety requires a higher level of a knee processor, then you would recommend that for your patient, correct?

A: The C-Leg will make you lazy, but it is known to be a very safe -- I can do the same thing with a Plie and I might still use the Plie.

Q: But is patient safety one of the considerations you --

A: That's always a --

Q: -- as a --

A: -- consideration. I'm sorry.

Q: You've got to let me fin- -- that's okay. You -- you knew my question. Let me ask it again. Is patient safety one of the considerations that you as a prosthetist takes into account when recommending a particular knee for your patient?

A: Yes.

Q: Okay. Now, is the C-Leg designed to allow a patient to walk backwards?

A: I know that it's been stated that the

Page 71

Genium allows that. I didn't understand why that claim was made because I've seen amputees on other microprocessors walk backwards. I can't s- -- recall that I've seen someone on a C-Leg walk backwards.

Q: Okay. My question is, is the C-Leg, was that designed for backward walking --

A: I've never seen --

Q: -- motion?

A: -- that claim. I -- I wouldn't know. It -- it is a specific claim of the Genium. It is not a specific claim of the C-Leg.

Q: Do you consider that a major difference between the two?

A: Not really because I've seen amputees, above-knee amputees walk backwards on other microprocessors.

Q: Have you seen other amputees walk backwards on a C-Leg?

A: No.

Q: Okay. What are the other microprocessors that you've seen oth- -- other amputees walk backwards with?

A: Definitely the Plie. Again, I think it's like your amputee going up stairs. I'm not sure

Page 72

it's the brand name. I think it's the person wearing it. I want to say the Orion, which is an Endolite product. It's never -- to my knowledge in all my years of experience, it's not been a request that amputees come to me saying, "Hey, I want to walk backwards." So it's never been in the forefront of my mind as one of the major issues in alternative de- -- decision-making and recommendations.

Q: Does a patient's employment requirements have a bearing on the type of knee that you will recommend for them?

A: Definitely.

Q: Okay. Are you aware of the requirements for Mr. Tolson's employment?

A: Yeah. Basically a number of things.

Q: He's a law-enforcement officer, correct?

A: Yes.

Q: Okay.

A: He's driving. He's walking. He's opening and closing things and he kneels at the firing range, and he's at a desk.

Q: Are you aware that the Genium was developed to be utilized by law-enforcement officers because it allows them to walk backwards?

Page 73

A: I've never seen that claim. So, no, I'm not aware of that.
Q: Okay. Did you do any research on the Genium to determine what it was actually capable of doing or some of the persons for which can take advantage of the Genium, particularly with the ability of a patient to walk backwards with the Genium?
A: Well, obviously, I've been to the meetings where I've seen the -- you know, their new product displays. I've been to their exhibits. I've listened to the -- what they tell make it'll do, the sales pitch, if you will. Or -- and I've also -- that's the rep -- the sales reps. I've also spoken with the clinicians or clin ed team, which Otto Bock has a huge clinical ed team. And, obviously, when you first start hearing about new products, you go to their Web site and you read what they claim. In terms of what it brings to the table, a- -- an additional function compared to the other microprocessors, I don't see it.
Q: You don't see a bene- -- any significant benefit between the Genium versus the C-Leg?
A: If walking backwards is a -- is a benefit and the C-Leg won't allow that. Again, I think some

Page 74

of that is the amputee. I've got amputees, you could put them in the Genium and they couldn't walk backwards. And I've got amputees that could walk backwards in just about anything you put them in. So a large part of these factors is not the brand name or the, quote, "that it's an MPK." It's what is the amputee capable of doing.
Q: Well, do you believe from a safety perspective that it's beneficial for law-enforcement officers to be able to move backwards, walk backwards?
MS. MAGUIRE: Objection to the term "law-enforcement" --
A: I'm --
MS. MAGUIRE: -- "officer."
A: -- not an expert in that area, so I -- I have no real opinion.
Q: Okay. In this case, is your opinion that Mr. Tolson does not need the Genium, is it based at all as to whether or not it's for his own safety; it would be better for him to be able to walk backwards while he was acting as a law-enforcement officer?
MS. MAGUIRE: Objection.
MR. VANGEISON: Objection to foundation. You can answer the question.

Page 75

A: Well, it hasn't been brought to my attention, or I haven't -- I don't know for a fact that he can't walk backwards in the C-Leg. And we don't know for a fact that he could walk backwards in -- in a Genium because they've never -- they -- if they were really interested, they could have done a trial use. Otto Bock will provide a knee and let you do a trial run. So if -- if this has already occurred and we know this for a fact, then I need to know that.
Q: Okay. If Otto Bock provided a trial knee for Mr. Tolson, the Genium, which is what Mr. Sachs has recommended, and if he was able to walk backwards with that knee and can't with the C-Leg, do you believe that that would be a benefit of having the Genium leg?
MS. MAGUIRE: Objection.
MR. VANGEISON: Objection, but you can answer.
A: Again, I'm not an expert in law enforcement, but my understanding of his job is that it's highly unlikely he's going to be encountering somebody in a shootout. And that's the only way I can imagine walking backwards would be a benefit. So I -- I don't see the benefit.

Page 76

Q: Why -- why do you say that it's highly unlikely that he would be -- not be involved in a shootout?
A: He's in the Social Security Administrative building, isn't he?
Q: A federal building that employs federal employees. And you believe the chance of him being involved in a shootout or facing an armed suspect is zero?
MS. MAGUIRE: Objection.
A: I'm not going statistically there.
Q: Well, I'm trying to figure out why --
A: I'm just saying --
Q: -- why you -- why you believe that it's highly unlikely that he would ever be involved in those type of situations.
A: It's just my opinion.
Q: Based upon what?
A: I mean, I would think the federal office buildings would be about as safe as it gets. He described his day-to-day activities in his deposition. Nowhere in any of that did he talk about conflict, apprehension, any of that kind of stuff.
Q: But -- but you are aware he wears a

Page 77

sidearm?
A: Oh, yeah.
Q: And he's a --
A: All security guards do.
Q: And he's a law-enforcement officer, police officer?
MS. MAGUIRE: Objection.
A: I didn't know --
MR. VANGEISON: Objection.
A: -- he was a police officer.
MR. VANGEISON: Foundation.
MR. GASTON: Okay.
MR. VANGEISON: He's not a police officer.
THE WITNESS: No, he's not.
Q: So you've fitted two persons with the Plie?
A: Oh, I've fit way more than that just more recently in my practice in Advanced. A year with SPS, I probably taught the Plie more than any of them, so multiple fittings for that.
Q: Okay.
A: Some having to back up and start from scratch and some just doing the programming and alignment.

Page 78

Q: And how do you define standard of care within the prosthetic industry that you work in?
MR. VANGEISON: Objection. Are we talking about standard of care with regard to malpractice or whether something is more often than not used?
MR. GASTON: Well, I'm talking about the standard of care that Mr. Schuch referenced in his report. That's what I'm talking about, that standard of care.
A: Well, standard of care, I've been down this road before, and in the medical profession, it's very hard to define. I think it's based on ethics, experience, the norm, what's acceptable.
Q: Are those the definitions that you used for the standard of care that you mentioned in your report?
A: The standard of care reference that I'm making in my report is frequency of recommendation. I'm not talking about the -- the broad spectrum of standard of care, but the standard recommendation, prescription provided and delivered and paid for. Need for pri- -- amputees in Mr. Tolson's category is not the C-Leg. It's the exception, not the standard. For years the standard for those amputees

Page 79

has been what's on his backup prosthesis or his activity level, an SNS hydraulic.
Q: Okay. So in order for a microprocessor knee to meet your definition of the standard of care, what frequency of recommendation would you need to see in the industry in order for you to raise that particular microprocessor knee to the standard of care?
A: I would expect --
MS. MAGUIRE: Objection.
A: -- at least half of all amputees being fitted were receiving that, 50th percentile or higher, obviously.
Q: Now, are you including in the amputees the levels zero, one and two?
A: No. They're -- that's not Mr. Tolson's category.
Q: Okay. So was -- then it's not all --
A: They're -- because they're obviously not going to get it.
Q: It's not 50 percent of all amputees?
A: No, because it's --
Q: Okay. So let's -- let's go back a little bit. So it would be 50 percent of all amputees who would qualify for a microprocessor knee, correct?

Page 80

A: A K3 or higher amputee.
Q: So it has to be K3 or K4. So -- and what knee do you believe fits the standard of care that you have defined?
MR. VANGEISON: He -- he -- asked and answered, but you can --
Q: What -- what knee? What microprocessor knee?
A: Well, it's not a microprocessor. I -- I don't think any of them are there. It's the -- what's -- it's called an SNS, swing and stance, hydraulic knee. The original -- there's three of them that I'm aware of. There's probably some knockoffs. The original one was developed by a German physicist who worked on the Manhattan Project and after the war felt guilty and helped developed the first SNS called the Mauch. His name was Hans Mauch.
Q: Back in 1940, right, '4- --
A: Yeah.
Q: -- '49, somewhere around there?
A: And when he died and his daughter took over the company, as frequently happens, all the employees bolted and went across the street and formed a company called K Tech. The patent had run

Page 81

out and they duplicated it ver- -- I mean, identical. K Tech got bought out by Endolite, which is a British company that also has a microprocessor. They actually developed a microprocessor that never made it to the States called the intelligent knee. Even -- it was -- it was invented and designed in Kobe, Japan. But they -- they sold that in Europe, the IP, the intelligent prosthesis, but it had issues.

Q: So --

A: When they brought their stuff to the -- to the United States, their manufacturing processes got better and they're respected now. But the British weren't well known for their quality assurance. But, anyway, there's a K Tech and then -- I think also the Mercury. I think that's an Endolite product that is along the same lines. And then there's probably a half a dozen knockoffs.

Q: For persons, in your experience, who are above-the-knee amputees at a level K3 or K4, how many C-Legs have you recommended for them percentage-wise?

A: Of K3/K4, how many C-Legs?

Q: Yes, sir.

A: I really don't know the number. The

Page 82

first one I did was d- -- a bilateral amputee in 2001 at Duke. When I was at Duke, I did a fair amount. What -- what does that number entail? I don't know. I don't keep statistics. Obviously, when I went to S -- when I went to the partnership company, our patients were predominantly K2. I fit probably three C-Legs there and one RHEO.

Q: And how many of the K Tech legs have you fitted?

A: Counting the amount and the K Tech, probably well over a hundreds.

Q: A hundred?

A: More -- more than a hundred. Whether it's approaching 200, I don't know. I did a lot of those back in the old days before I ever even got to Duke.

Q: Well, what I'm trying to figure out is if you believe that the -- the standard of care with respect to the frequency of recommendation has to be at least 50 percent in order for you to consider that leg the standard of care in the industry, do you have any statistics as to for the amputees that are of the K3 and K4 level, how many of them actually received a C-Leg versus the K Tech leg?

A: Well, the C-Leg didn't come out until

Page 83

'97. The Mauch -- which, I'm going to call them all the same. They're SNS technology. So it doesn't matter of the label. Whether it's K Tech, Mercury, Mauch, thousands and thousands and thousands of those things have been fit over the years. It was standard issue for veterans. Most of the places I went, I was the leader and I got to choose my patients, and I -- I obviously enjoyed working with young, active patients. I did have older patients that I used what's called stance-locking knees, also known as safety knees, a much simpler design, safer design. But that was for my patients that couldn't vary their walking speed. Remember, to get a hydraulic, you got to have variable cadence.

Q: Well, what I'm trying to figure out is since 1997 to today's date, for each year, what is the percentage of the amputees in the K3/K4 level that have been si- -- fitted with C-Legs versus the other --

A: I'm a --

Q: -- legs?

A: -- a prosthetist. I'm not a statistician. I have no -- no idea. I know what I hear. I know what I -- you know, the -- the people you talk to. I know the clinics I've worked in.

Page 84

When we go to clinics where you have five different companies represented, like at the VA, I know what's prescribed. I may not get that amputee. But we -- we're -- we have a pulse on the trends in our profession.

Q: Does the frequency of recommendation have to do with whether the patient -- whether the knee that you recommend is going to be paid for by some -- by some type of insurance or by Medicare or by VA?

A: In the older days, no. Today, much more so. And then temper that a little bit with when the C-Leg first came out, people were very timid because it wasn't getting paid for. Now the C-Leg does get paid for. So that -- that equation has been watered down or is not as much -- you know, it's not as l- -- weighted a factor.

Q: But it's -- it's -- it's one of the factors you consider when determining standard of care for a patient, correct?

A: No. I don't determine standard of care for a patient by reimbursement. I might have my desired standard of care altered, depending on where I'm working and their -- their policies and procedures. But if there's any risk, I'm

Page 85

conservative.
Q: Okay.
A: But my standard of care is what -- what do I think is normal for this patient? What would most patients of this nature get if they walked into a VA clinic with five prosthetists or five companies represented and a doctor from the VA, if they walked into a Duke rehab clinic where you have a physician, a bunch of therapists, a bunch of prosthetists? That's what my standard of care is based on.
Q: Do you find the standard of care to be a nationwide standard, or is it different from locality to locality?
A: I think it's -- my experience has been it's pretty much nationwide with -- with a lot of different levels in --
Q: All right. Well --
A: -- in all locations, with Hanger being, by far, the most aggressive because they can afford to be.
Q: What I'm trying to figure out is why would your standard of care be modified based upon who you were working for at a particular time?
A: Well, when I worked for Duke University Medical Center, reimbursement wasn't our number one

Page 86

priority. Patient care. So if I thought the standard of care was a microprocessor, I did it. If I didn't get paid, we could afford it. When I went to work with my partnership, he didn't like that standard of care, you know, because if we didn't get paid, it killed us.
Q: So your standard of care would be modified based upon whether or not you get paid for your recommendation?
A: My standard of care would not be modified, my --- my ch- -- choice of care. My standard may be here and I would put that in my notes, that, you know, barring -- you know, barring the potential financial implications, this patient deserves a C-Leg. But because of its coverage and not being able to get it preapproved, I'm -- I'm going to opt for -- and -- and I don't think that's a breach of the standard of care. I'm going to the next level down.
Q: Okay. So are you telling me for patients that you've fitted with prosthetic devices, above-the-knee amputations, you have in the past recommended a microprocessor knee for that patient because you believe that was the standard of care but because of financial considerations could only

Page 87

order a lower level of knee for the patient?
A: Yeah, but -- but most of those occasions were when I was unsuccessful in obtaining approval from the insurance company.
Q: And is it your -- in your report you identified a knee that's called the Xenium, X-E-N-I-U-M.
A: I think that was a mistake on my part. The -- the --
Q: Did -- did --
A: -- Genium has an X3 for the military. That's the one that Sachs talked about that looks Batman-like.
Q: It just -- just came out -- just released to the public in the last year, correct?
A: It -- I didn't know if it had been released to the public.
Q: Well -- well -- well, you --
A: That was the one that was developed more closely --
Q: Right.
A: -- with that relationship you talked about.
Q: Right. And -- and X3 is the -- is the newest advanced knee above and beyond the Genium,

Page 88

correct?
A: Yeah. The -- the features it brings are what they call waterproof, which I -- I question highly, and higher impact resistance, higher shock resistance.
Q: Well, in -- in your report when you reference the Xenium, were you talking about the X3?
A: I think he confused me. I was not talking -- I -- I was talking about the Genium.
Q: You're talking about the --
A: Or I made --
Q: -- Gen- --
A: -- a spelling error.
Q: Okay. So your -- every time in your report the word X-E-N-I-U-M is mentioned, you meant to say Genium, correct?
A: That's correct.
Q: Okay. Got you. All right.
A: Like I say, when I read about the X3, I think it confused me on -- I had an interview where they asked me if I'd fit the Xenium 3. They -- they were likewise confused.
Q: All right. Even though you say the Genium on page 2 of your report is the rare extreme selection for treatment of these amputees, would it

Page 89

be fair to say you don't have any statistical basis to support that conclusion?
A: Not at this time, no.
Q: Okay. All right. And one statement you said, "Unlike the C-Leg, the Xenium" -- and you meant to say Genium -- "is not tried and proven successful for Mr. Tolson"; is that correct?
A: I have no evidence that it has been.
Q: Right. But that's not a reason that you don't believe he should receive the Genium, do you, simply because he hasn't had it yet and hasn't tried it yet?
A: My experience with over 40 years and lots of advice from senior mentors, clinicians, is when a patient is successful -- which we've documented; it's been testified to; he's gotten equipment that's beyond the standard of care, above and beyond the standard of care; he's successful with that -- my experience is you don't just keep changing because something new comes out.
If he's unhappy with what he's got or he's -- he's pointing out issues that he has, that he can't achieve certain things he's looking for, then, yeah, maybe you reconsider. But I don't see that as being the case. They've all testified that

Page 90

he's been returned to his pre-amputation level of function.
Q: Can Mr. Tolson jog?
A: Hi- -- according to testimony from Sachs, yes. According to Mr. Tolson's own testimony, two things, "I haven't been taught how to do that yet" and -- I thought I wrote it down. I thought he said -- on -- on Sachs' deposition, page 35, he said, "Could someone like Mr. Tolson be a jogger?" He said, "Yes."
Q: Have you seen --
A: Oh, here's my notes. "Swim, I swam all my life." Blah, blah, blah. "I fell on the deck. Supposed to be getting trained how to run," quote, "but I never took that step yet." So he apparently does not. And whether or not he's capable remains to be seen.
Q: Can -- is the C-Leg designed for jogging?
A: No.
Q: Is the C-Leg designed for running?
A: It's more impact is the key word. There are people who jog on the C-Leg, but Otto Bock's real -- makes it real clear that it's more intended for a C3 than a C4. C4 not only implies more function --

Page 91

MR. VANGEISON: K --
A: -- but with that --
MR. VANGEISON: C or K?
THE WITNESS: K-level. K4? What --
MS. MAGUIRE: You said C.
MR. VANGEISON: Yeah.
THE WITNESS: -- what did I say?
MR. VANGEISON: You said C.
THE WITNESS: K4.
A: With the K4, it implies not only more function, but more impact, and they're careful that -- that it -- it's not designed for higher impact.
Q: So it's not designed for running, the C-Leg?
A: No.
Q: Can Mr. Tolson ride a bike with a C-Leg?
A: I think one of the things he said in his deposition testimony of things he can't do is ride a bike, but that -- if he can't, that would be him, not because of the C-Leg because it has a mode that is programmable for free swing. And one the examples they give that you would use free swing would be riding a stationary or mobile bike.
Q: Can a person bowl with the C-Leg?
A: I don't see why not.

Page 92

Q: Now, can a person such as Mr. Tolson pivot on his left leg with the C-Leg?
A: When you say pivot, yes. There's nothing to stop him from doing that. I don't know if you're implying torque absorber unit.
Q: No. You --
A: I think he has a torque absorber on his activity leg, which allows that rotation to occur in the components. But he can pivot on his foot.
Q: Can he pivot on the leg, on -- on that leg?
A: You're asking questions that are leg specific. So much of these questions are amputee specific. What he can and can't do aren't provided by or claimed by the C-Leg versus the Genium versus the Plie. Now, when I put -- put a rotator -- a torque absorber in there, that's one of the things they claim, golf, racquet sports, absorb rotational activity. But the C-Leg -- the C- -- the C-Leg is a knee. It's not an entire leg. I can put a torque absorber below it and above the foot, and Otto Bock makes the perfect size. It's been used many times. The first C-Legs I fit, we had torque absorbers in there because she was a double amputee.
Q: Does he have a torque absorber in his

Page 93

C-Leg?
A: I'd have to look, which I'm glad to do. But I don't recall that it was there.
Q: Would you be opposed to him getting a leg that has a torque absorber in it?
A: I think he already has one on his activity prosthesis.
Q: Okay.
A: Which is more appropriate.
Q: Can you -- can Mr. Tolson stand on his tippy-toes with the C-Leg that he has now?
A: I -- I'd quantify that and say that none of these feet move downwards the way you and I can stand on our tiptoes. So he's not going to move his feet down to lift himself up. He can shift his weight forwards onto his tiptoes. And depending on his ability to balance there, there's nothing to preclude him from doing that.
Q: Okay. Now, you -- you -- you said that you believe he has returned to -- he performs all the activities of daily living and work the same full job as he had prior to the injury; is that correct?
A: That was my understanding of their deposition testimony.

Page 94

Q: Okay. Can he carry heavy objects with the C-Leg?
A: I think it was stated that he can carry objects. That was one of Sachs' comments, that he carries objects. Whether he used the adjective "heavy," I don't recall.
Q: What is the most amount of weight that you would ever recommend for a patient such as Mr. Tolson who has the C-Leg to carry safely?
A: It would depend on his weight versus the weight rating or limitations of the C-Leg. And I think he's 245 -- 275, so you don't want to exceed the weight rating of the knee, so 30 pounds, 25 pounds, a suitcase, a reasonable suitcase, a briefcase.
Q: With the C-Leg, when he's carrying an object, does he know where his foot is without looking at it?
A: Again, you're -- you're asking -- I know what you're implying in terms of brand-specific microprocessor. Amputees inherently know where their foot is. They don't have sensation. And the comment that Sachs made about when he doesn't even know where his foot is, ask any amputee; they'll tell you they know where it is. They may not know

Page 95

exactly -- well, they do know when they touch the ground because they have force reaction that's transferred all the way up the line, but they don't know the same way you and I know. It's not through sensation. But they know from their -- their femur position in space, their hip muscles. They know from their rhythmic -- and rhythm in their gait. They have a pretty good sense of where their -- their foot is, whether they're carrying weight or not.
Q: Is there a -- a term in the prosthetic industry that refers to that inability of a person to know where his foot is without looking at it? Is there a particular word?
A: Well, a proprioception would be the word that I'm thinking of.
Q: Can you define that for me?
A: A proprioception is, I would say, sensory feedback, a sensory ability to know positional space, but it's also the innate and -- and that sensory may not be coming from his foot or his shin bone, but it can come at the hip, and is overall center of gravity and sense of balance. A lot of a proprioception comes from your equilibrium.
Q: In your opinion, did you have any

Page 96

problems with Mr. Berry or Mr. Sachs's projected costs for Mr. Tolson's C-Leg, taking out of the equation how long he's going to live? Do you have any --
A: No. We have no argument.
Q: Okay. So then you -- do you believe that the C-Leg is an appropriate leg for Mr. Tolson in light of his amputation, in light of his work requirements, in light of his daily activity requirements?
A: Yeah. The -- the entire program that they projected is tried and proven. And, you know, I state that, that it's accepted and we have no argument with that.
THE VIDEOGRAPHER: Can -- can you repeat that answer for me right there? You were scratching --
THE WITNESS: Oh, sorry.
A: The entire program, meaning what they recommend and h- -- have provided is based on reality. It's based on success and testified to by two different individuals. As far as that success goes, I can't argue against it.
Q: You have no problem with it?
A: I have no problem with it.

Page 97

Q: Okay. So let's -- let's get to the point where -- what you do have a problem with. And I believe you have a problem with the recommendation of the more advanced knee for Mr. Tolson, which would be the Genium, correct?

A: I'm not buying into the fact that it's that much more advanced. It doesn't bring any more function to the table than what he already has.

MR. VANGEISON: Before we go further, can we take a quick break here?

THE WITNESS: Sure.

THE VIDEOGRAPHER: We -- we've got about six minutes on the tape so this is a good time. That's the end of DVD number 1. We're off the record at two o'clock p.m.

[RECESS - 2:00 P.M. TO 2:07 P.M.]

THE VIDEOGRAPHER: This is the beginning of DVD number 2. We are back on the record at 2:07 p.m.

Q: Okay. Mr. Schuch, I believe you just provided an opinion that you do not believe that the Genium is beneficial for Mr. Tolson because it does not provide more function to Mr. Tolson than what he already has; is that correct?

A: I'm not sure that I said it would not be

Page 98

beneficial. I just said I don't see where it brings anything more to the table. His own prosthetist, Sachs, said in -- when asked about new technology becoming available, he mentioned the Genium and he qualified it by saying, "which is basically the C-Leg." Unless I'm missing something here, the basic microprocessor functions that we've been talking about all day are what the Genium brings.

Q: Do you believe that the Genium offers a higher degree of stability when walking on uneven surfaces and when moving in multiple directions over the C-Leg?

A: That claim's probably out there. All I could say is prove it to me. Help me understand why.

Q: Well, I want to know whether or not you disagree with that claim.

A: I don't agree or disagree with it. I -- I --

Q: Okay.

A: I have not seen any evidence that -- that shows that. It's still the same basic concept.

Q: Now, do you believe the Genium would not increase Mr. Tolson's ability to walk backwards?

A: I don't know that he even has that

Page 99

ability. I have no evidence that it would provide that ability. And I know plenty of amputees that walk backwards on other AK prosthesis. I would state like I did with the guy going up the stairs, that's more of an individual amputee attribute and skill level than it is what brand of leg he's wearing.

Q: Do you believe the Genium would not be beneficial to Mr. Tolson with respect to his ability to transverse obstacles and ascend stairs step over step versus the C-Leg?

A: The Genium does not power the knee. It does not -- just because it's the Genium does not per- -- and I'm not -- I don't like your question in the sense of would not be beneficial. I'm just saying that it's not going to lift him up the stairs. If he can't do it in the C-Leg, he not nec- -- isn't necessarily going to be able to do it in the Genium.

Q: Would the Genium make it easier for him to transverse obstacles and ascend stairs step over step?

A: Not that I'm aware of.

Q: Okay. Would the Genium improve his ability to ascend shallow ramps and hills?

Page 100

A: Again, I have no evidence that it would.

Q: Do you have any evidence that it would not?

A: No.

Q: Okay.

A: I mean, it's just -- I keep saying it's the same thing. It's a -- it's a C-Leg with a few more gadgets on it. The concepts of how it reacts to the input -- input, the angle data, the force data, it -- it's still the same concept.

Q: Is the goal of a prosthetist such as yourself when you have a patient such as Mr. Tolson who sustained an above-knee amputation to try to get him back to the level of functioning that closely matches what he had with his own leg?

A: Yeah, that's a fair statement.

Q: Okay.

A: And beyond if you can. In some cases that occurs, Paralympians typically.

Q: In the last ten years, how many times have you testified at trial for either the injured patient or the defendant?

A: At trial?

Q: Yes, sir.

A: Not many. For prosthetics or either?

Page 101

Q: No. I'm -- I'm talking about prosthetics, in the field of prosthetics.
A: The whole field of prosthetics?
Q: The field of prosthetics.
A: Exclude orthotics?
Q: Yes.
A: At trial, in the last ten years, I'm going to say one unless I'm missing something.
Q: How long ago was that?
A: This past fall.
Q: And who did you testify for?
A: The counselor or the -- or the case?
Q: Both, if you know.
A: Seay, S-E-A-Y, versus -- in some cases I see it as Leniz, L-E-N-I-Z; Ossur, O-S-S-U-R, and the University of Alabama.
Q: What was that case about?
A: The synopsis is Leniz fit a patient with a flex foot, carbon fiber, pretty high activity foot made by Ossur. The patient was over the weight limit. The -- when I say weight limit, the -- all these products are ISO tested and load rated. The patient was significantly over the weight limit. He was working for the University of Alabama at the time. The prosthesis broke. The patient fell. I

Page 102

think the first time he didn't get terribly hurt. He repaired the prosthesis, gave it back to him, claims that's when he understood the weight restrictions. He claims he didn't understand it the first time around.
Q: Who, the -- the prosthetist or the patient?
A: The pr- -- prosthetist. It's not --
Q: Okay.
A: -- the patient's responsibility.
Q: Okay.
A: He didn't weigh him. You -- first, you've got to know for sure what the patient weighs. And, two, you've got to know all the parameters or restrictions. So he repaired it and gave it back to him, and that's when he claims he discovered that he was overweight and told him to lose weight. It broke again. The second time he got hurt much more significantly. And this was over the course of about eight or ten years. Provided him with a new prosthesis that was an over- -- it was a 500-pound system. So it -- it was weight rated significantly above his patient. But gave him back the repaired prosthesis a third time. The f- -- and -- the -- the -- similar to what this guy's experiencing, he's

Page 103

wearing his -- Tolson is wearing his activity prosthesis because his socket doesn't fit on his C-Leg and he needs a new socket. Well, the socket fit of the 500-pound system was not as comfortable. And he repaired the old prosthesis, the flex foot, gave it back to him again and it broke a third time. This time, he broke his sound leg so bad that he had to have an amputation.
Q: I'm going to guess you testified against the prost- -- prosthetist in that case?
A: Yes.
MR. VANGEISON: No.
MR. GASTON: He didn't?
MS. MAGUIRE: He doesn't like him. Kidding.
MR. GASTON: You testified -- off the record, you're a funny man. Okay. Back -- back on --
A: I would've had a hard time testifying --
Q: Yeah. I -- I --
A: -- on his behalf.
Q: I would think so. I would think --
A: I would say go talk to your insurance company.
Q: Is -- is that the only time in the last

Page 104

ten years you've been to court?
A: That I can recall. I've done some orthotic trial.
Q: Okay. And for the times that you've reviewed cases in the medical-legal field such as where we are in this case, can you tell me how many times it's been for the plaintiff versus the defendant?
A: A certain time period?
Q: If you can give me an estimate, your best estimate over the last 20 years.
A: Okay. I've been doing this about 20. In the early days what got me into this is what I called am- -- amputee advocacy. I did cost-for-life projections. I don't like life care plans. That's what care planners do. So I was almost all plaintiff. As -- as word of mouth spread and I -- that was pretty much it. I didn't -- didn't advertise. I got asked to do defense case. It -- so in the middle years of those 20, it was starting to balance out. It was still more plaintiff than defense. People keep asking me specifics, and I've never kept statistics until this last year. On my revenue summary sheet, I started putting down that -- you know, what type, where I served on the case.

Page 105

And it was this past year 75 percent defense and 25 percent plaintiff, but I had more invoices per plaintiff than per defendant.

Q: And do you know how much money you made per year over the last five years for providing expert witness testimony and consultation in these type of cases?

A: It's been all over the map because of what my clinical role was. When I was at Duke, it was a lot because I was sought after through Duke as well. When we took Duke's PO department private, my role changed completely. I -- I needed -- so it dropped way off. But I know the -- I just did my taxes. I think my net revenue, net profit for the LLC last year was $62,000.

Q: And do you know what your gross earnings was?

A: In the 80's.

Q: Eighties. And has it been in the 80's steadily over the last five years?

A: Last year was -- Maryland was good to me. Word of mouth must -- I had five or six cases in Maryland, three of them identical type cases, two of them the same hospital. But it was an unusual -- a higher than normal year. The year I was at SPS, I

Page 106

think my net profit was 22,000, and I didn't push it at all.

Q: Have you testified in federal court?

A: Yeah, I think so.

Q: In federal court, you're required to keep a list of the cases that you have. Do you have that list?

A: I had what I call a testimony vitae. And I had -- I also had an IT guy that claims we had a backup system, and my computer crashed in the fall of 2012. I lost all of it. I reconstructed what I could and I'm -- I'm keeping all of it again on my new laptop here with a -- I back it up personally onto a thumb drive or a flash drive.

Q: That -- that -- that's one of the documents we asked you to bring with you. Do -- do you think you can print that out for us and --

A: I sure can.

Q: -- give it to your lawyers? Okay. All right.

A: It -- it's accurate for -- since the computer crashed. It's a guesstimate beyond that.

Q: I understand. All right. So ha- -- have you ever been qualified as a -- a -- in court to provide cost -- is it, say, cost-for-life projection

Page 107

analysis? Is that how you --

A: Yeah, I've done that.

Q: Okay.

A: Ironically, the two trials were out of the country. One was in Bermuda and one was in Grand Cayman. I've done it orthotically in the United States.

Q: Do you -- orth- -- okay. But how about for -- for prosthetics?

A: I -- I haven't had a trial that -- where I was, you know, working for the plaintiff. I've done lots of cost projections.

Q: For the --

A: Rare -- rarely even gets to the deposition.

Q: Okay. Now, you've done --

A: So --

Q: -- a lot of cost projections in the field of orthotics?

A: More in prosthetics.

Q: More in prosthetics, okay.

A: I've done a couple in orthotics.

Q: Okay. All right. So do you have, by chance, Mr. Berry's report there in that box?

A: I do.

Page 108

Q: I just want to go to the last page where he's given a total. So -- so I'm trying to figure out what we agree to and what we don't, and I'll just go to the very last page and read this number to you and I'll ask you if you agree with that -- that's a fair and reasonable number for --

A: Are we on the original report or the --

Q: Yes, sir. The -- the original report. We'll stick with the original report first.

A: Last page.

Q: Last page.

MS. MAGUIRE: Just for the record, what's the date on that report?

MR. VANGEISON: Is this the April 29, 2013 report that --

MR. GASTON: I don't know.

THE WITNESS: Yes.

MS. MCGUIRE: Okay. Just that would be easier.

MR. GASTON: Here we are. Thank you.

Q: Okay. Now, if I understand your testimony correctly, that you are in agreement with Mr. Berry and Mr. Sachs that the fair and reasonable cost for Mr. Tolson's prosthetic devices and the

Page 109

care needs associated with those devices projected out to the age 82 would be $687,350.75. Is that accurate?
A: I'm --
MS. MAGUIRE: Objection.
A: -- looking at --
MS. MCGUIRE: Go ahead.
A: I'm looking at that figure, but I think I made it clear in my report that one of your things on your Notice of Deposition was what evidence do I use for actuarial data. I go to the Social Security tables if I -- if I'm doing a cost projection. And I know he isn't going to -- you know, I didn't -- no -- no actuarial data is going to support him living. So that was my only objection. But that figure --
MR. VANGEISON: You broke off. Living to what?
THE WITNESS: Living to 80 -- beyond 82. They're showing a totally new prosthesis at 82, and additional expenses such as socket replacement, et cetera, at 83 and 84. That's assuming he's going to live to be 86 or 87.
Q: Okay. Let -- let me -- let me ask you another question. I want you to assume in this case as a hypothetical question Mr. Tolson lives to age

Page 110

83 for the hypothetical. Would you then believe that the amount of $687,350.75 as projected by Dale Berry and Gregory Sachs would be a fair and reasonable cost projection for the prosthetic devices and care that Mr. Tolson will need until he reaches the age of 83, assuming he lives to the age of 83?
MS. MAGUIRE: Objection.
A: We don't --
MR. VANGEISON: Same objection, but you can answer.
A: We don't take any argument with that. And I -- I think I said that in my report.
Q: Is that a yes, you agree?
A: That's a yes.
Q: Okay. So, then, your disagreement is with respect to the projected life expectancy of Mr. Tolson, correct?
A: In this particular part, yes.
Q: Now, have you ever been qualified as an expert with respect to life expectancy estimates?
A: I wasn't qualified as an expert on that subject. The presentation that I made in my testimony or report was accepted based on my reference, and that was not in the United State --

Page 111

one -- one orthotic one was in the United States. The two prosthetic ones where I actually went to trial were, what, British --
Q: Okay. But not in the --
A: -- countries.
Q: -- in the United States?
A: Not in the United --
Q: Not in the United States. Do you intend to give an opinion in this case as to what Mr. Tolson's life expectancy is?
A: I haven't been asked to. If I'm asked to, I -- I'll do what I normally do. I'll go to the Social Security actuarial data.
Q: But at this time here today, you do not have --
A: That's not --
Q: -- an opinion --
A: No.
Q: You've not been asked to give a projection as to Mr. Tolson's life expectancy and you do not have an opinion as to Mr. Tolson's life expectancy?
A: I do not.
Q: Okay. All right. So -- and it looks like the disagreement is between what you believe is

Page 112

fair and reasonable cost projections, assuming Mr. Tolson lives to the age of 83, would be the difference between the $687,350 amount for the C-Leg versus the additional $250,000 for the advanced Genium?
A: Correct.
Q: Okay. I got you. All right. Is there any manufacturing guidelines, documents, publications in the field of prosthetic devices that you've used or you feel is reasonably reliable for the issues in this case?
A: Well, I think the world has become dependent on the Internet. I see you printed off quite a bit of stuff there. So that's my first line, is the Internet. And, generally, especially on new products, it's going to be biased by the -- the company. It's -- it's market driven. I -- I find it hard to get actual data or -- I'm not -- I'm not a scientist, but to get facts that -- clinical facts that really convince me of certain things. But the longer a product has been out like the C-Leg, they've got more clinical studies on it showing its efficacy than any other microprocessor and probably more than a lot of the old -- you know, the SNS types.

Page 113

Q: My question was do you believe that there are any manufacturing guidelines, publications, and including any articles, journals, studies that are reasonably reliable --
A: Yes.
Q: -- in the field of -- in the field of prosthet- --
MS. MAGUIRE: Let -- let him finish the question.
MR. GASTON: That's okay.
MR. VANGEISON: Yeah. Let him finish the question.
Q: -- in the field of prosthetics for the issues involved in this case?
MR. VANGEISON: What he's asking you is whether or there's anything that's authoritative in your field that you routinely rely on in order to make decisions about issues such as are in this case.
A: There are -- there are journal articles that are accepted, peer-reviewed on the C-Leg. I'm unable to find anything like that on the Genium.
Q: But did you do a journal or article search for the Genium for this case?
A: Not a specific journal article.

Page 114

Q: Did you do any --
A: If the articles are there, they're going to be referenced on their Web site, and I did not see -- I was not referenced or referred to any.
Q: But -- so you went to the Otto Bock Web site?
A: Yeah, of course.
Q: Okay. So -- but you did no other search in any medical journal or association you may be a member of for issues involved in this case?
A: I haven't done that in years. I do Internet searches, journal searches.
Q: Do you intend at this point to rely upon any such journal articles, publications, manufacturing guidelines for any of the opinions that you intend to give in this case?
A: My opinions to date, obviously, are not t- -- reliant on that. If I'm asked to -- to do that research, I'm capable of doing it.
Q: Okay. But as of today's date, you have not been asked to do that research?
A: Correct.
Q: Okay. Have you told me all the opinions that you've reached in this case and intend to give at trial?

Page 115

A: I think we've covered --
MS. MAGUIRE: Objection. Go ahead.
Q: Go ahead.
A: I mean, I -- I -- my responses have been on your questions and queries. I haven't come in here with a list of -- so, obviously -- and they haven't asked me their questions. So it's going to be dependent on y'all, but I'm not holding anything back.
Q: So -- so far --
MS. MAGUIRE: I like that answer.
Q: So far we've been -- we've been at this for about two and a half hours. Do you think you've told me all the opinions that you've reached in the case so far?
A: I think so.
Q: All right. And have you told me all the factual basis for your opinions?
A: Thus far, yes.
Q: Okay. All right. That's all the questions I have. Thank you. These fine people might have some questions of you. I'm not sure.
MS. MAGUIRE: I don't, but I don't know if you do.
MR. VANGEISON: Let's take a quick break.
THE WITNESS: Okay.
THE VIDEOGRAPHER: We're off the record at 2:28 p.m.
[RECESS - 2:28 P.M. TO 2:33 P.M.]
THE VIDEOGRAPHER: We're back on the record at --
MS. MAGUIRE: Oh.
THE VIDEOGRAPHER: -- 2:33 p.m.
MS. MAGUIRE: You had more questions?
MR. VANGEISON: Did you just make copies of those?
MR. GASTON: Yeah. That's all I need.
MR. VANGEISON: Okay.
MR. GASTON: I just -- I just need the court reporter to mark as an exhibit Mr. Schuch's notes, and you can keep the originals and we can take a copy of it, if that's okay.
THE WITNESS: Do you want a copy made today to take with you?
MR. GASTON: Yes, sir. Well, the court reporter will help us out with that. Thank you.

Page 116

Page 117

THE VIDEOGRAPHER: Is that it?
MR. VANGEISON: And I have no fur-
-- I have no questions, but I do want to advise the witness that under the Maryland rules, you have the right to review the transcript, if you wish, for its accuracy. You can also, if you think that you've made an error, make changes to the substance of your answers. If you do so, then Mr. Gaston has the right to come back to ask questions about that change. I would -- you're not my witness, so you -- you're not my client, so you can do whatever you'd like, but I'd prefer if you reviewed the -- the testimony.
THE WITNESS: And sign?
MS. MAGUIRE: Uh-huh.
MR. VANGEISON: And sign, yes.
THE WITNESS: Or do an errata sheet?
MR. VANGEISON: Right.
MS. MAGUIRE: Correct.
THE WITNESS: That's usually the way I'm advised. So that's --
MS. MAGUIRE: I agree.
THE WITNESS: I'll choose to do that.
THE VIDEOGRAPHER: Is that it?

Page 118

THE WITNESS: I almost always find the errata --
THE VIDEOGRAPHER: This is the end of DVD number 2 and concludes the videotaped deposition of Michael Schuch. We are off the record at 2:34 p.m.
[DEPOSITION EXHIBIT NO. 9 MARKED FOR IDENTIFICATION]

_____

[WITNESS DISMISSED AT 2:34 P.M.]
READING AND SIGNING WAIVED

Page 119

I have read the foregoing pages which contain a correct transcription of the answers given by me to the questions herein recorded. My signature is subject to corrections on the attached errata sheet, if any.

Signed this ____ day of _____, 2014.

_____
Charles Michael Schuch

STATE OF _____
COUNTY OF _____

Subscribed and sworn to before me this _____ day of _____, 2014.

_____
Notary Public

My commission expires:

_____

Page 120

STATE OF NORTH CAROLINA
COUNTY OF WAKE

C E R T I F I C A T E

I, Tammy Johnson, notary public/court reporter, do hereby certify that the above-named was duly sworn or affirmed prior to the taking of the foregoing deposition; and that said deposition was taken and transcribed under my supervision; and that the foregoing pages, inclusive, constitute a true and accurate transcription of the testimony of the witness.

I do further certify that the persons were present as stated in the caption.

I do further certify that I am not of counsel for or in the employment of either of the parties to this action, nor am I interested in the results of this action.

This is the 7th day of April, 2014.

_____
Notary Public #20011560080